

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method, comprising:

detecting, ~~by a mobile node, border information about regions of an area in beacons of access nodes~~ of a first technology network; and

deciding, ~~by the mobile node, initiating on~~ a handover procedure between the first technology network and a second technology network based on the detected ~~region border~~ information.

2. (Withdrawn) A method of controlling handover between a first technology network and a second technology network, comprising the steps of:

arranging border access nodes for accessing the first technology network at border regions of an area of the first technology network, the border access nodes indicating information about a border region;

arranging non-border access nodes for accessing the first technology network at non-border regions of the area of the first technology network, the non-border access nodes indicating information about a non-border region;

detecting the information about the border and non-border regions; and

deciding initiating a handover procedure between the first and second technology networks based on the detected information.

3. (Withdrawn) The method according to claim 2, comprising the step of:

in case the detected region information is border region information, aggressively deciding initiating the handover procedure from the first technology network to the second technology network.

4. (Withdrawn) The method according to claim 2, further comprising the step of:

in case the detected region information is non-border region information, conservatively

deciding initiating the handover procedure from the first technology network to the second technology network.

5. (Withdrawn) The method according to claim 2, further comprising the steps of:
 - detecting a signal strength from the first technology network; and
 - in case the detected signal strength is below a predetermined threshold, deciding initiating the handover procedure between the first and second technology networks based on the detected region information.
6. (Withdrawn) The method according to claim 2, further comprising the steps of:
 - detecting a signal strength from the first technology network; and
 - in case the detected signal strength is below a predetermined threshold and the detected region information is border region information, aggressively deciding initiating the handover procedure from the first technology network to the second technology network.
7. (Withdrawn) The method according to claim 2, further comprising the steps of:
 - detecting a signal strength from the first technology network; and
 - in case the detected signal strength is below a predetermined threshold and the region information is non-border region information, conservatively deciding initiating the handover procedure from the first technology network to the second technology network.
8. (Withdrawn) A method, comprising:
 - detecting, by a mobile node, information about regions of an area of a first technology network; and
 - deciding, by the mobile node, preparing a handover procedure between the first technology network and a second technology network based on the detected region information.
9. (Withdrawn) A method of controlling handover between a first technology network and a second technology network, comprising the steps of:
 - arranging border access nodes for accessing the first technology network at border regions

of an area of the first technology network, the border access nodes indicating information about a border region;

arranging non-border access nodes for accessing the first technology network at non-border regions of the area of the first technology network, the non-border access nodes indicating information about a non-border region;

detecting the information about the border and non-border regions; and

deciding preparing a handover procedure between the first and second technology networks based on the detected information.

10. (Withdrawn) The method according to claim 9, comprising the step of:

in case the detected region information is border region information, aggressively deciding preparing the handover procedure from the first technology network to the second technology network.

11. (Withdrawn) The method according to claim 9, comprising the step of:

in case the detected region information is non-border region information, conservatively deciding preparing the handover procedure from the first technology network to the second technology network.

12. (Withdrawn) The method according to claim 9, further comprising the steps of:

detecting a signal strength from the first technology network; and

in case the detected signal strength is below a predetermined threshold, deciding preparing the handover procedure between the first and second technology networks based on the detected region information.

13. (Withdrawn) The method according to claim 9, further comprising the steps of:

detecting a signal strength from the first technology network; and

in case the detected signal strength is below a predetermined threshold and the detected region information is border region information, aggressively deciding preparing the handover procedure from the first technology network to the second technology network.

14. (Withdrawn) The method according to claim 9, further comprising the steps of:
 - detecting a signal strength from the first technology network; and
 - in case the detected signal strength is below a predetermined threshold and the region information is non-border information, conservatively deciding preparing the handover procedure from the first technology network to the second technology network.
15. (Withdrawn) A method, comprising:
 - detecting, by a mobile node, information about regions of an area of a first technology network; and
 - deciding, by a mobile node, preparing a handover procedure between the first technology network and a second technology network based on the detected region information, and
 - deciding performing actual handover between the first and second technology networks based on the detected region information.
16. (Withdrawn) A method of controlling handover between a first technology network and a second technology network, comprising the steps of:
 - arranging border access nodes for accessing the first technology network at border regions of an area of the first technology network, the border access nodes indicating information about a border region;
 - arranging non-border access nodes for accessing the first technology network at non-border regions of the area of the first technology network, the non-border access nodes indicating information about a non-border region;
 - detecting the information about the border and non-border regions; and
 - deciding preparing a handover procedure and performing actual handover between the first and second technology networks based on the detected information.
17. (Withdrawn) The method according to claim 16, further comprising the steps of:
 - in case the detected region information is border region information, aggressively deciding preparing the handover procedure from the first technology network to the second technology network;

detecting a signal strength from the first technology network; and
in case the detected signal strength is below a predetermined threshold, deciding
performing the actual handover between the first and second technology networks based on the
detected region information.

18. (Withdrawn) The method according to claim 16, further comprising the steps of:
in case the detected region information is non-border region information, conservatively
deciding preparing the handover procedure from the first to second technology network;
detecting a signal strength from the first technology network; and
in case the detected signal strength is below a predetermined threshold, deciding
performing the actual handover between the first and second technology networks based on the
detected region information.

19. (Withdrawn) A method of controlling handover between a first technology network and a
second technology network, comprising the steps of:
detecting information about regions of an area of the first technology network;
detecting information about a movement of a mobile node in the first technology
network; and
deciding initiating a handover procedure between the first and second technology
networks based on the detected region information and movement information.

20. (Withdrawn) A method of controlling handover between a first technology network and a
second technology network, comprising the steps of:
arranging border access nodes for accessing the first technology network at border regions
of an area of the first technology network, the border access nodes indicating information about a
border region;
arranging non-border access nodes for accessing the first technology network at non-
border regions of the area of the first technology network, the non-border access nodes having
overlapping coverage with that of the border access nodes and indicating information about a
non-border region;

detecting the information about the border and non-border regions;
storing region information detected at certain time instances;
detecting information about a movement of a mobile node in the first technology network on the basis of detected and stored region information; and
deciding initiating a handover procedure between the first and second technology networks based on the detected region and movement information.

21. (Withdrawn) A method of controlling handover between a first technology network and a second technology network, comprising the steps of:

detecting information about regions of an area of the first technology network;
detecting information about a movement of a mobile node in the first technology network; and
deciding preparing a handover procedure between the first and second technology networks based on the detected region information and movement information.

22. (Withdrawn) A method of controlling handover between a first technology network and a second technology network, comprising the steps of:

arranging border access nodes for accessing the first technology network at border regions of an area of the first technology network, the border access nodes indicating information about a border region;

arranging non-border access nodes for accessing the first technology network at non-border regions of the area of the first technology network, the non-border access nodes having overlapping coverage with that of the border access nodes and indicating information about a non-border region;

detecting the information about the border and non-border regions;
storing region information detected at certain time instances;
detecting information about a movement of a mobile node in the first technology network on the basis of detected and stored region information; and

deciding preparing a handover procedure between the first and second technology networks based on the detected region and movement information.

23. (Withdrawn) A method of controlling handover between a first technology network and a second technology network, comprising the steps of:

detecting information about regions of an area of the first technology network;

detecting information about a movement of a mobile node in the first technology network; and

deciding preparing a handover procedure between the first and second technology networks based on the detected region information and movement information, and deciding performing actual handover between the first and second technology networks based on the detected region information and movement information.

24. (Withdrawn) A method of controlling handover between a first technology network and a second technology network, comprising the steps of:

arranging border access nodes for accessing the first technology network at border regions of an area of the first technology network, the border access nodes indicating information about a border region;

arranging non-border access nodes for accessing the first technology network at non-border regions of the area of the first technology network, the non-border access nodes having overlapping coverage with that of the border access nodes and indicating information about a non-border region;

detecting the information about the border and non-border regions;

storing region information detected at certain time instances;

detecting information about a movement of a mobile node in the first technology network on the basis of detected and stored region information; and

deciding preparing a handover procedure and deciding performing actual handover between the first and second technology networks based on the detected region and movement information.

25. (Currently Amended) A mobile node, comprising:

a detecting unit configured to detect border information in beacons of access nodes ~~about regions of an area~~ of a first technology network; and

a deciding unit configured to decide ~~initiating on~~ a handover procedure between the first technology network and a second technology network based on the detected ~~region~~ border information.

26. (Withdrawn) A mobile node for controlling handover between a first technology network and a second technology network, comprising:

means for detecting information about a border region which is transmitted by border access nodes for accessing the first technology network which are located at border regions of an area of the first technology network and information about a non-border region which is transmitted by non-border access nodes for accessing the first technology network which are located at non-border regions of the area of the first technology network; and

means for deciding initiating a handover procedure between the first and second technology networks based on the detected information.

27. (Withdrawn) The mobile node according to claim 26, further comprising means for aggressively deciding initiating the handover procedure from the first to the second technology network in case the detected region information is border region information.

28. (Withdrawn) The mobile node according to claim 26, further comprising means for conservatively deciding initiating the handover procedure from the first to the second technology network in case the detected region information is non-border region information.

29. (Withdrawn) The mobile node according to claim 26, further comprising:

means for detecting a signal strength from the first technology network; and

means for deciding initiating the handover procedure between the first and second technology networks based on the detected region information in case the detected signal strength is below a predetermined threshold.

30. (Withdrawn) The mobile node according to claim 26, further comprising:

means for detecting a signal strength from the first technology network; and

means for aggressively deciding initiating the handover procedure from the first to the second technology network in case the detected signal strength is below a predetermined threshold and the detected region information is border region information.

31. (Withdrawn) The mobile node according to claim 26, further comprising:

means for detecting a signal strength from the first technology network; and

means for conservatively deciding initiating the handover procedure from the first to the second technology network in case the detected signal strength is below a predetermined threshold and the region information is non-border information.

32. (Withdrawn) A mobile node, comprising:

a detecting unit configured to detect information about regions of an area of a first technology network; and

a deciding unit configured to decide preparing a handover procedure between the first technology network and a second technology network based on the detected region information.

33. (Withdrawn) A mobile node for controlling handover between a first technology network and a second technology network, comprising:

means for detecting information about a border region which is transmitted by border access nodes for accessing the first technology network which are located at border regions of an area of the first technology network and information about a non-border region which is transmitted by non-border access nodes for accessing the first technology network which are located at non-border regions of the area of the first technology network; and

means for deciding preparing a handover procedure between the first and second technology networks based on the detected information.

34. (Withdrawn) The mobile node according to claim 33, further comprising means for aggressively deciding preparing the handover procedure from the first to the second technology network in case the detected region information is border region information.

35. (Withdrawn) The mobile node according to claim 33, further comprising means for conservatively deciding preparing the handover procedure from the first to the second technology network in case the detected region information is non-border region information.

36. (Withdrawn) The mobile node according to claim 33, further comprising:
means for detecting a signal strength from the first technology network; and
means for deciding preparing the handover procedure between the first and second technology networks based on the detected region information in case the detected signal strength is below a predetermined threshold.

37. (Withdrawn) The mobile node according to claim 33, further comprising:
means for detecting a signal strength from the first technology network; and
means for aggressively deciding preparing the handover procedure from the first to the second technology network in case the detected signal strength is below a predetermined threshold and the detected region information is border region information.

38. (Withdrawn) The mobile node according to claim 33, further comprising:
means for detecting a signal strength from the first technology network; and
means for conservatively deciding preparing the handover procedure from the first to the second technology network in case the detected signal strength is below a predetermined threshold and the region information is non-border information.

39. (Withdrawn) A mobile node, comprising:
a detecting unit configured to detect information about regions of an area of a first technology network; and
a first deciding unit configured to decide preparing a handover procedure between the

first technology network and a second technology network based on the detected region information, and a second deciding unit configured to decide performing actual handover between the first and second technology networks based on the detected region information.

40. (Withdrawn) A mobile node for controlling handover between a first technology network and a second technology network, comprising:

means for detecting information about a border region which is transmitted by border access nodes for accessing the first technology network which are located at border regions of an area of the first technology network and information about a non-border region which is transmitted by non-border access nodes for accessing the first technology network which are located at non-border regions of the area of the first technology network; and

means for deciding preparing a handover procedure and means for deciding performing actual handover between the first and second technology networks based on the detected information.

41. (Withdrawn) The mobile node according to claim 40, further comprising:

means for aggressively deciding preparing the handover procedure from the first to the second technology network in case the detected region information is border region information;

means for detecting a signal strength from the first technology network; and

means for deciding performing the actual handover between the first and second technology networks based on the detected region information in case the detected signal strength is below a predetermined threshold.

42. (Withdrawn) The mobile node according to claim 40, further comprising:

means for conservatively deciding preparing the handover procedure from the first to the second technology network in case the detected region information is non-border region information;

means for detecting a signal strength from the first technology network; and

means for deciding performing the actual handover between the first and second

technology networks based on the detected region information in case the detected signal strength is below a predetermined threshold.

43. (Withdrawn) A mobile node, comprising:

 a first detecting unit configured to detect information about regions of an area of a first technology network;

 a second detecting unit configured to detect information about a movement of a mobile node in the first technology network; and

 a deciding unit configured to decide initiating a handover procedure between the first technology network and a second technology network based on the detected region information and movement information.

44. (Withdrawn) A mobile node for controlling handover between a first technology network and a second technology network, comprising:

 means for detecting information about a border region which is transmitted by border access nodes for accessing the first technology network which are located at border regions of an area of the first technology network and information about a non-border region which is transmitted by non-border access nodes for accessing the first technology network which are located at non-border regions of the area of the first technology network, the non-border access nodes having overlapping coverage with that of the border access nodes;

 means for storing region information detected at certain time instances;

 means for detecting information about a movement of a mobile node in the first technology network on the basis of detected and stored region information; and

 means for deciding initiating a handover procedure between the first and second technology networks based on the detected region and movement information.

45. (Withdrawn) A mobile node for controlling handover between a first technology network and a second technology network, comprising:

 means for detecting information about regions of an area of the first technology network;

 means for detecting information about a movement of a mobile node in the first

technology network; and

means for deciding preparing a handover procedure between the first and second technology networks based on the detected region information and movement information.

46. (Withdrawn) A mobile node for controlling handover between a first technology network and a second technology network, comprising:

means for detecting information about a border region which is transmitted by border access nodes for accessing the first technology network which are located at border regions of an area of the first technology network and information about a non-border region which is transmitted by non-border access nodes for accessing the first technology network which are located at non-border regions of the area of the first technology network, the non-border access nodes having overlapping coverage with that of the border access nodes;

means for storing region information detected at certain time instances;

means for detecting information about a movement of a mobile node in the first technology network on the basis of detected and stored region information; and

means for deciding preparing a handover procedure between the first and second technology networks based on the detected region and movement information.

47. (Withdrawn) A mobile node for controlling handover between a first technology network and a second technology network, comprising:

means for detecting information about regions of an area of the first technology network;

means for detecting information about a movement of a mobile node in the first technology network; and

means for deciding preparing a handover procedure between the first and second technology networks based on the detected region information and movement information, and means for deciding performing actual handover between the first and second technology networks based on the detected region information and movement information.

48. (Withdrawn) A mobile node for controlling handover between a first technology network and a second technology network, comprising:

means for detecting information about a border region which is transmitted by border access nodes for accessing the first technology network which are located at border regions of an area of the first technology network and information about a non-border region which is transmitted by non-border access nodes for accessing the first technology network which are located at non-border regions of the area of the first technology network, the non-border access nodes having overlapping coverage with that of the border access nodes;

means for storing region information detected at certain time instances;

means for detecting information about a movement of a mobile node in the first technology network on the basis of detected and stored region information; and

means for deciding preparing a handover procedure and deciding performing actual handover between the first and second technology networks based on the detected region and movement information.

49. (Withdrawn) An access node of a first technology network, comprising:

a setting unit configured to set information about at least a first region and a second region of an area of the first technology network in which region the access node is located, the region information being first technology network information; and

a transmitting unit configured to transmit the region information.

50. (Withdrawn) The access node according to claim 49, in which the access node is a WLAN access point and the setting unit is configured to set region information by assigning proper values to certain bits reserved in the beacon frames of the WLAN access points, the bit values indicating the region information where the access point is located.

51. (Withdrawn) A communication network system, comprising:

a mobile node according to claim 49.

52. (New) The method of claim 1, wherein the first technology network is a Wireless Local Access Network and the second technology network is a cellular network.

53. (New) The method of claim 1, wherein the border information comprises information about regions of an area of the first technology network, wherein the regions comprise border regions of the area of the first technology network and non-border regions of the area of the first technology network.

54. (New) The mobile node of claim 25, wherein the border information comprises a border bit in the beacons, wherein the border bit indicates whether an access point is placed at a border of the first technology network, and the detecting unit is configured to detect the border bit.

55. (New) The mobile node of claim 25, wherein the deciding unit, when deciding on the handover procedure, is configured to initiate the handover procedure.

56. (New) The mobile node of claim 25, wherein the deciding unit, when deciding on the handover procedure, is configured to prepare the handover procedure.

57. (New) The mobile node of claim 25, wherein the deciding unit, when deciding on the handover procedure, is configured to prepare and perform the handover procedure.

58. (New) The mobile node of claim 25, comprising:

a movement detecting unit configured to detect information about a movement of the mobile node in the first technology network, wherein the deciding unit, when deciding on the handover procedure, is configured to initiate the handover procedure, is configured to initiate the handover procedure based on the detected border information and movement information detected by the movement detecting unit.

59. (New) A computer-readable storage medium storing a program for causing a computer to execute:

detecting border information in beacons of access nodes of a first technology network; and

deciding on a handover procedure between the first technology network and a second technology network based on the detected border information.